

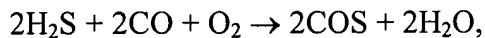
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A COS treatment apparatus for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, which comprises:

a first reactor into which the gasified gas is to be introduced, the gas having the first reactor being configured to increase an initial concentration of COS in the gas and decrease concentrations of H₂S, CO and O₂ in the gas at a gas temperature of at least 300°C; and

a second reactor located at a downstream side of a gasified gas flow with respect to the first reactor, the second reactor being configured to decrease the increased concentration of COS in the gas passed through the first reactor to a concentration lower than the initial concentration of COS in the gas,

wherein the first reactor comprises an O₂ removal catalyst for accelerating the following reaction:



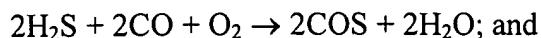
the O₂ removal catalyst consisting of TiO₂ and Cr₂O₃ or consisting of TiO₂ and NiO, and wherein the second reactor comprises a COS conversion catalyst.

2-3. (Cancelled)

4. (Original) The COS treatment apparatus according to claim 1, wherein said O₂ removal catalyst is located in a higher-temperature region with respect to said COS conversion catalyst.

5. (Currently Amended) A COS treatment method for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, the method comprising:

increasing an initial concentration of COS in the gas and decreasing concentrations of H₂S, CO and O₂ in the gas ~~removing O₂ from the gas~~ by using an O₂ removal catalyst consisting of TiO₂ and Cr₂O₃ or consisting of TiO₂ and NiO at a gas temperature of at least 300°C to accelerate the following reaction:



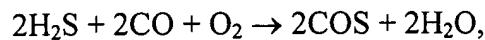
after the removing of O₂ from the gas increasing of the initial concentration of COS in the gas and the decreasing of the concentrations of H₂S, CO and O₂ in the gas, decreasing the increased concentration of COS in the gas to a concentration lower than the initial concentration of COS in the gas by converting COS contained in the gas to H₂S by using a COS conversion catalyst.

6-7. (Cancelled)

8. (Currently Amended) The COS treatment method according to claim 5, wherein said removing O₂ from the gas increasing of the initial concentration of COS in the gas and decreasing of the concentrations of H₂S, CO and O₂ in the gas is performed at a higher temperature with respect to said converting COS to H₂S decreasing of the increased concentration of COS in the gas.

9. (Currently Amended) A COS treatment apparatus for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, comprising:

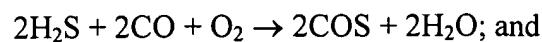
a reactor into which the gasified gas is to be introduced, the reactor being configured to convert COS to H₂S in the presence of O₂, the reactor comprising a TiO₂ catalyst carrying Cr₂O₃ and BaO, wherein the TiO₂ catalyst carrying Cr₂O₃ and BaO is an O₂ removal catalyst for accelerating the following reaction:



and wherein the TiO₂ catalyst carrying Cr₂O₃ and BaO is a COS conversion catalyst.

10. (Currently Amended) A COS treatment method for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, the method comprising:

removing O₂ from the gas by using a TiO₂ catalyst carrying Cr₂O₃ and BaO to accelerate the following reaction:



simultaneously converting COS to H₂S by using the TiO₂ catalyst carrying Cr₂O₃ and BaO.